

Remarks/Arguments:

By this Amendment, Applicants have amended claims 14 and 23. Claims 14-23 are pending.

Applicants note that the Examiner indicated at page 2 of the Office Action that "claims 13-23 are pending in this application." This is an obvious typographical error since claims 1-13 have been cancelled.

Objections to the Specification

The title to the invention has been objected to as being "not descriptive." In addition, the abstract has been objected to as being "not indicative of the invention." By this Amendment, Applicants have amended the title and the abstract to overcome the basis for the Examiner's objections.

Claim Objection

Claim 23 is objected to because it is dependent on cancelled claim 13. Applicants have amended claim 23 to overcome the basis for this objection.

Claim Rejections Under Section 102

Claims 14-23 stand rejected under 35 U.S.C. Section 102(b) as being anticipated by Kito. By this Amendment, Applicants respectfully traverse the Section 102(b) rejection.

Claim 14 is an independent claim to which claims 15-23 depend, either directly or indirectly.

Independent claim 14 is directed to a method for fabricating a semiconductor laser device and includes the following steps:

- **forming a plurality of grooves** in a surface of **one conductive type of an InP layer**,
- thermally treating the InP layer in an atmosphere including at least a gas containing phosphorous and a gas containing arsenic in a mixed state, thereby forming a plurality of active regions made of InAsP in the plurality of grooves, and
- **forming an other conductive type of a semiconductor layer after forming the active regions.**

It is Applicants' position that the method of fabricating a semiconductor laser as defined by claim 14 is patentably distinguished from the Kito Reference, at least based on the features of forming a plurality of grooves in a surface of one conductive type of InP layer and forming another conductive type of a semiconductor layer after forming the active regions. These features are neither taught nor suggested in the Kito Reference.

Applicants submit that the Amendment to claim 14 is not the addition of new matter but is based on the application as originally filed. In this connection Applicants point, for example, to the disclosure in the originally filed specification at page 10, line 20 to page 11, line 20, and to Figure 2.

At least one advantage of the above identified features of amended claim 14 is that the claimed method provides the plurality of active regions having a structure shown in Figure 1B or Figure 5C which can be formed without etching any active region. This advantage is discussed in further detail in the originally filed application at, for example, page 9, line 10 to line 31.

As noted above, the Kito Reference is in sharp contrast to the method defined in Applicants' claim 14. The Kito Reference in general relates to a distributed feedback semiconductor laser which includes an InP substrate and a multiple layer structure formed on a main surface of the InP substrate.

More specifically, the Kito Reference describes a plurality of V-grooves which are formed in one conductive type (e.g., n-type) of InP layer 2. In addition, an InAsP absorption layer 3 is formed thereon, and the same conductive type (e.g., n-type) of InP cladding layer 4 is further formed. (See Example 1, Figure 1 and Figure 2 of the Kito Reference; Applicants also note that other embodiments of the Kito Reference have a similar structure). This structure around the absorption layer 3 is known as a "grating" structure and the InP layer 2 and the InP cladding layer 4 are of the same conductive type (e.g., n-type). Accordingly, the InAsP absorption layer 3 can not be an active region. And moreover, such a structure simply does not teach or suggest the above noted features of Applicants claim 14. In addition, because the InAsP absorption layer 3 can not be an active layer, the Kito Reference can not provide the above noted advantage of Applicants' claimed invention.

For the reasons noted above, Applicants respectfully submit that the Kito Reference neither anticipates nor renders obvious Applicants' claim 14, as well as claims 15-23 which are dependent thereon. Applicants therefore request that the Section 102(b) rejection directed to claims 14-23 be withdrawn.

Appln. No.: 10/628,550
Amendment Dated January 13, 2005
Reply to Office Action of August 13, 2004

YAO-4316US1

In view of the foregoing remarks and amendments, Applicants respectfully submit that claims 14-23 are in condition for allowance. Reconsideration and allowance of all pending claims are respectfully requested.

Respectfully submitted,



Daniel N. Calder, Reg. No. 27,424
Attorney for Applicants

DNC/lcf

Enclosure: Abstract

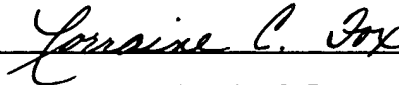
Dated: January 13, 2005

P.O. Box 980
Valley Forge, PA 19482-0980
(610) 407-0700

The Commissioner for Patents is hereby
authorized to charge payment to Deposit
Account No. **18-0350** of any fees associated
with this communication.

The Commissioner for Patents is hereby
authorized to charge payment to Deposit
Account No. **18-0350** of any fees associated
with this communication.

I hereby certify that this correspondence is being deposited
with the United States Postal Service as first class mail,
with sufficient postage, in an envelope addressed to:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA
22313-1450 on: **January 13, 2005**



Lorraine C. Fox

L:\YAO\4316US1\AMENDMENT.011305.DOC